

UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA

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CONDAIR GROUP AG,

Case No. 21-CV-0863 (PJS/ECW)

Plaintiff,

v.

ORDER

DRI-STEEM CORPORATION,

Defendant.

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Steven P. Fallon, Paul R. Kitch, Lawrence J. Crain, Benjamin C.R. Lockyer, Allyson M. Martin, and Paul G. Fina, GREER, BURNS & CRAIN, LTD.; Eric H. Chadwick and Zachary P. Armstrong, DEWITT LLP, for plaintiff.

Kimberly Dodd and Kelsey C. Boehm, FOLEY & LARDNER LLP; Henry M. Helgen, III, and Leland P. Abide, KUTAK ROCK LLP, for defendant.

In this patent-infringement action, plaintiff Condair Group AG ("Condair") alleges that humidifiers manufactured by defendant Dri-Steem Corporation ("Dri-Steem") infringe claim 17 of U.S. Patent No. 10,634,372 (the "'372 patent"), which is owned by Condair. Compl. ¶¶ 13–14. On August 22, 2022, the Court issued an order construing certain terms of the patent pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). See ECF No. 125; *Condair Grp. AG v. Dri-Steem Corp.* ("Condair Markman"), No. 21-CV-0863 (PJS/ECW), 2022 WL 3585157 (D. Minn. Aug. 22, 2022).

This matter is now before the Court on Dri-Steem's motion for summary judgment of invalidity. Dri-Steem argues that claim 17 is invalid as obvious and indefinite. For the reasons that follow, the Court denies Dri-Steem's motion.<sup>1</sup>

## I. BACKGROUND

The Court will assume familiarity with its *Markman* order, which discusses claim 17 in detail. Very briefly, the '372 patent relates to dual-stage vaporizing humidifiers that are connected to HVAC systems and used to humidify entire buildings. A dual-stage humidifier differs from the more common single-stage humidifier by incorporating a secondary heat exchanger, which increases the energy efficiency of the humidifier by using hot exhaust gases created by the burning of fuel to boil water in the primary heat exchanger to warm replacement water as that water is being fed into the humidifier.

In arguing that claim 17 would have been obvious to a person of ordinary skill in the art ("POSITA") before the effective filing date of the claimed invention, Dri-Steem relies mostly on Korean Patent No. 10-1243698 ("Shin"). Shin discloses a boiler "having a structure that maximizes thermal efficiency by installing double economizers [heat exchangers]." Shin Patent at 1 [ECF No. 156-2]. This efficiency is accomplished by

<sup>1</sup>In responding to Dri-Steem's motion, Condair raised a number of complaints about Dri-Steem failing to disclose information and waiving arguments. The Court need not address these complaints, however, as the Court is denying Dri-Steem's motion.

“selectively controlling when water from the hot water tank . . . should be reheated using the hot exhaust gases by selectively running water from the hot water tank . . . through the post-economizer [heat-exchanger] . . . and back into the hot water tank.” Sheriff Rebuttal Rep. at 38 [ECF No. 159-4].

## II. ANALYSIS

### A. Standard of Review

Summary judgment is warranted “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). A dispute over a fact is “material” only if its resolution might affect the outcome of the suit under the governing substantive law. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A dispute over a fact is “genuine” only if “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Id.* “The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor.” *Id.* at 255.

Patents are presumed valid. 35 U.S.C. § 282(a). Therefore, in order to establish the invalidity of a patent claim, the party asserting invalidity (here, Dri-Steem) must do so by clear and convincing evidence. *Microsoft Corp. v. I4I Ltd. P'ship*, 564 U.S. 91 (2011) (holding that § 282 requires an invalidity defense to be proved by clear and convincing

evidence); *Innovention Toys, LLC v. MGA Ent., Inc.*, 637 F.3d 1314, 1320 (Fed. Cir. 2011) (same).

#### *B. Obviousness*

Dri-Steem's primary invalidity argument focuses on the alleged obviousness of claim 17. An invention cannot be patented "if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains." 35 U.S.C. § 103. Determining whether an invention was obvious is ultimately a legal question for the court, but that determination is based on several factual findings, including:

- (1) the scope and content of the prior art; (2) the level of ordinary skill in the pertinent art; (3) the differences between the claimed invention and the prior art; and (4) evidence of secondary factors, such as commercial success, long-felt need, and the failure of others.

*Innovention Toys*, 637 F.3d at 1320 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966)).

The Court has carefully studied the parties' briefs and supporting materials and presided over a lengthy argument on the issue of obviousness. Ultimately, the Court concludes that a number of disputed issues of fact must be decided by a jury before the Court will be able to determine whether the invention disclosed by claim 17 would have

been obvious to a POSITA before the effective filing date of the claimed invention, including:

1. Whether boiler art (generally) and Shin (specifically) are relevant prior art;
2. Whether boiler art teaches away from using a secondary heat exchanger in a humidifier;
3. Whether it would have been obvious to a POSITA to combine a secondary heat exchanger with a pulsed valve;
4. Whether there is a nexus between claim 17 and the success of the parties' humidifiers; and
5. Whether Dri-Steem copied Condair's humidifier.

Therefore, the Court denies Dri-Steem's motion for summary judgment on the issue of obviousness.

### *C. Indefiniteness*

Dri-Steem also argues that claim 17 is invalid as indefinite because it does not "particularly point[] out and distinctly claim[] the subject matter which [Condair] . . . regards as [its] invention," in violation of 35 U.S.C. § 112(b). *Id.* Specifically, Dri-Steem contends that claim 17 "is an apparatus claim that also recites a method of using the apparatus." Def. Memo. at 32 [ECF No. 154].

In *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, the Federal Circuit held that a single claim covering both an apparatus and a method of using the apparatus is indefinite

(and therefore invalid) under 35 U.S.C. § 112(b). 430 F.3d 1377, 1384 (Fed. Cir. 2005).

“The concern underlying [the *IPXL* holding] was that claiming both an apparatus and method of using the apparatus within a single claim can make it unclear whether infringement occurs when one creates an infringing system, or whether infringement occurs when the user actually uses the system in an infringing manner.” *MasterMine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307, 1313 (Fed. Cir. 2017) (cleaned up).

In the years following its decision in *IPXL Holdings*, the Federal Circuit has clarified that an apparatus claim is not indefinite simply because it uses functional language. *See Microprocessor Enhancement Corp. v. Tex. Instruments Inc.* (“*MEC*”), 520 F.3d 1367, 1375 (Fed. Cir. 2008). A claim disclosing an apparatus that is “capable of performing [certain] functions” is not indefinite so long as the claim’s functional language is tied to the structure of the apparatus. *MasterMine*, 874 F.3d at 1316 (quoting *MEC*, 520 F.3d at 1375). By contrast, in the majority of cases in which the Federal Circuit has held a claim to be indefinite for mixing apparatus and method elements, the claim specifically prescribed *user* action. *See, e.g., IPXL Holdings*, 430 F.3d at 1384 (“the user uses the input means”); *In re Katz Interactive Call Processing Pat. Litig.*, 639 F.3d 1303, 1318 (Fed. Cir. 2011) (“said individual callers digitally enter data”). *But see Rembrandt Data Techs., LP v. AOL, LLC*, 641 F.3d 1331, 1339 (Fed. Cir. 2011).

Claim 17 is an apparatus claim. According to Dri-Steem, claim 17 is indefinite under *IPXL Holdings* because, in addition to describing the claimed humidifier, claim 17 “contains elements that require a method of using the [humidifier].” Def. Memo. at 32. Specifically, Dri-Steem contends that two elements—(1) “a secondary fill valve . . . which is pulsed to provide cool water” and (2) “the water from a primary fill valve is fed directly into the water tank”—describe method steps. *See id.* (citing Compl. Ex. 1 at 20, col. 18, ll. 54–60 [ECF No. 1-1]). The Court disagrees.

The verbal phrases on which Dri-Steem focuses (“is pulsed” and “is fed”) describe the functions of structural elements of the claimed humidifier, not actions that must be performed by a user of the humidifier. Specifically, the language “a secondary fill valve . . . which is pulsed to provide cool water” merely explains the function of the secondary fill valve; the pulsing is not controlled by a human, but by an algorithm that is described elsewhere in the ‘372 patent. *See Compl. Ex. 1 at 17, col. 12, ll. 39–57.* And the language “the water from a primary fill valve is fed directly into the water tank” simply describes the path that water follows through the humidifier after leaving the primary fill valve; again, no human is doing any feeding. Cf. *MasterMine*, 874 F.3d at 1316. As Condair aptly explained in its brief, “while hoses, pipes, valves and other structural components can feed water, it is not apparent how any human could feed water directly into a water tank from a valve.” Pl. Resp. at 26 [ECF No. 181].

In short, claim 17 does not describe any method steps—i.e., any actions that must be performed by someone who uses the claimed apparatus. Indeed, Dri-Steem’s own expert admitted that the pulsing of the secondary fill valve and the feeding of water directly from the primary fill valve into the water tank is done automatically by the humidifier and does not require human intervention. Klausner Depo. at 49–50 [ECF No. 172-11].

For these reasons, claim 17 is not indefinite. A POSITA would readily understand the scope of the claimed invention and readily understand that claim 17 is infringed when an infringing humidifier is created, even if that humidifier is never used. *MasterMine*, 874 F.3d at 1316; cf. *IPXL Holdings*, 430 F.3d at 1384 (describing confusion a POSITA would face regarding infringement).

ORDER

Based on the foregoing, and on all of the files, records, and proceedings herein,  
IT IS HEREBY ORDERED THAT defendant Dri-Steem’s motion for summary judgment  
[ECF No. 152] is DENIED.

Dated: May 16, 2023

s/Patrick J. Schiltz

Patrick J. Schiltz, Chief Judge  
United States District Court